

PATENT  
App. Ser. No.: 10/675,420  
Atty. Dkt. No. ROC920030189US1  
PS Ref. No.: IBMK30199

### REMARKS

This is intended as a full and complete response to the Office Action dated February 28, 2006, having a shortened statutory period for response set to expire on May 28, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-20 are pending in the application prior to entry of this amendment. Claims 1-7 have been canceled without prejudice. New claims 21-24 have been added to recite aspects of the invention. Applicants submit that the amendments and new claims do not introduce new matter.

#### Claim Rejections - 35 U.S.C. § 112

Claims 1, 8, 15, and dependant claims 2-7, 9-14, and 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1, 8, 15, and dependant claims 2-7, 9-14, and 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-7 have been canceled and independent claims 8 and 15 have been amended. Applicants submit that claims 8-20 comply with the enablement requirement, in that they enable one skilled in the art to practice the invention, as claimed. Applicants also submit that claims 8-20 are definite and particularly point out and distinctly claim subject matter Applicants regard as their invention. Accordingly, Applicants respectfully request withdrawal of these rejections.

#### Claim Rejections - 35 U.S.C. § 102

Claims 1, 2, 4-9, 11-16, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,909,594 to Ross et al. (hereinafter "Ross"). Applicants respectfully traverse this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Page 7

463886\_2

## PATENT

App. Ser. No.: 10/675,420  
Atty. Dkt. No. ROC920030196US1  
PS Ref. No.: IBMK30199

*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). In this case, Ross fails to teach each and every element as set forth in the claims.

For example, regarding claim 8, Ross fails to teach a memory device with "N multiplexers for selectively routing signals between individual N I/O lines and addressable arrays, wherein each multiplexer routes data between an associated array and a particular I/O line selected in response to a set of one or more control signals; and a multiplex controller for producing said set of one or more control signals, in response to a signal provided by a device external to the memory device" as recited. As described in the specification (e.g., in paragraph 30), such an arrangement may allow for 'any for any' swapping of I/O lines to arrays.

Regarding claims 15 and 21, Ross fails to teach computer systems or memory modules that include memory devices with spare I/O lines and addressable arrays connected via multiplexers in the claimed manner. While the Examiner refers to multiplexers 611-614 in Ross, these multiplexers "can be commanded so that connections may be established from one particular device to any of the other three devices", but do not allow for selective routing between memory arrays and normal/spare I/O lines, as recited in the claims.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Claim Rejections - 35 U.S.C. § 103

Claims 3, 10, and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross in further view of Logic and Computer Design Fundamentals by *Mano and Kime* (hereinafter *Mano*). Claim 3 has been cancelled. Claims 10 and 17 depend from claims 8 and 13, respectively, which Applicants submit are allowable for reasons discussed above. Accordingly, Applicants submit these claims are also allowable and request withdrawal of this rejection.

**PATENT**  
App. Ser. No.: 10/675,420  
Atty. Dkt. No. ROC920030199US1  
PS Ref. No.: IBMK30199

### Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



Randol W. Read  
Registration No. 43,876  
PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)